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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,815	09/25/2003	Paul Moulton	A35985 - 070121.0573	7621

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EXAMINER

HORTON, YVONNE MICHELE

ART UNIT PAPER NUMBER

3635

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/670,815	Applicant(s) MOULTON ET AL.	
	Examiner Yvonne M. Horton	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-15, 17-21, 23, 24, 26-30, 32, 33 is/are rejected.
- 7) ☒ Claim(s) 9, 16, 22 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no support in the specification for "the cavity" of claims 6, 20 or 26. Although the specification does disclose the use of two apparently different tubes/channels that appear to serve two different functions, nowhere does the specification detail the use of a cavity. Correction and/or clarification requested.

Claim Rejections - 35 USC § 112

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

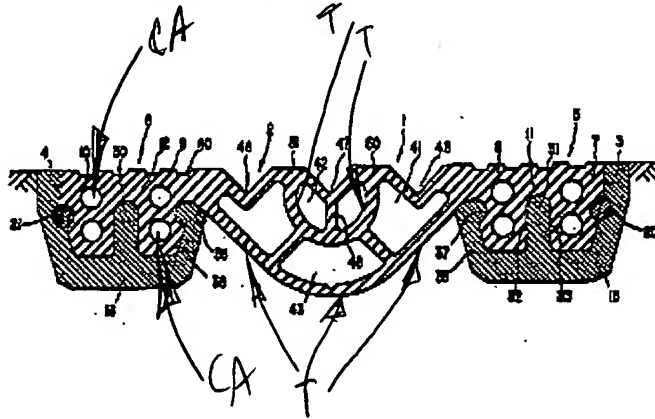
In the claims, it is not clear if "the cavity" is the same or something other than the "tubes/channels" mentioned in the specification. The specification clearly identifies that the "tubes/channels" (10a-d) aid in the ability of the compression member to respond elastically to changes in the expansion joint width, page 8. However, the "tubes/channels" (20a,b,c,etc) are used to receive the splice joint connectors, page 13. It is not clear if claims 6, 20, or 26 are referring to the "tubes/channels" (10a-d) or the "tubes/channels" (20a,b,c,etc). Clarification is required.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1,2,5-8,10 stand and claims 26,30,32 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #4,637,085 to HARTKORN.

Regarding claims 1,32 and 33, HARTKORN discloses the use of a compression seal for an expansion joint (1) between two adjacent elements (15,16) including a compressible



sealing portion (2) having an elastic membranes (T,48) and at least a lateral wing (5,6) extending therefrom and extruded as one-piece therewith; wherein the lateral wings clearly, as seen in the drawings, have a thickness larger than the elastic membranes (T,48) and are configured to be bonded to a surface of the adjacent elements (15,16). In reference to claim 2, HARTKORN discloses that his wings (5,) have a thickness of 3.5 cm that converts to 1.37 inches and is at least a half of an inch. Regarding claims 5 and 6, the compressible sealing portion includes a membrane having longitudinal tubes/cavities (T) that extends along the length thereof and are inherently known to aid in varying the lateral width of the member. Regarding claims 7 and 8, the lateral wing portion (5,6) includes longitudinal channels (CH) and grooves (as at 40). In reference 10, the compressible seal of HARTKORN has the same cross-sectional configuration throughout. Regarding claims 26 and 30, as mentioned earlier, the "tubes/channels" (T) inherently change or deform in order to vary the width of the device.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 3 and 4 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #4,637,085 to HARTKORN in view of US Patent #5,213,441 to BEARVELDT. HARTKORN discloses the basic claimed compression seal except for explicitly detailing the type of rubber material used to form the seal. BEARVELDT teaches that it is known in the art to use EPDM rubber to form a compressible sealing member. Although BEARVELDT does not explicitly detail ethylene propylene tetrapolymers, as per the applicant's own disclosure and from what is known by one having skill in the art, ethylene propylene tetrapolymers, in trade, is referred to as EPDM. Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the compression seal of HARTKORN out of the EPDM material of BEARVELDT in order to provide stability, carry a torque and to accommodate different lengths in joint sizes.

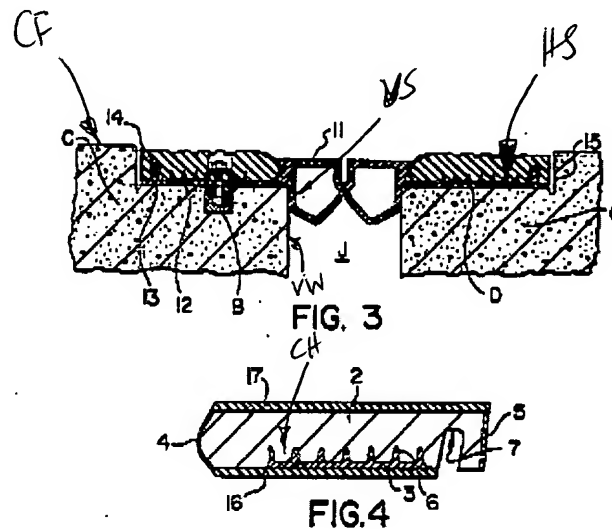
Claims 11-15,19-21,23 and 25 stand and claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,584,152 BAERVELDT in view of 4,637,085 to HARTKORN. BAERVELDT discloses the use of an expansion system including an expansion joint (J) disposed between adjacent concrete elements (C) of a structure; a one-piece compression seal having a compressible sealing portion (11) having an elastic membranes (T) and at least a lateral wing (12) extending therefrom; and a block-out region (letter (e) column 4) such that the block-out region is adapted to

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receive the lateral wing (12) and is bonded thereto. BAERVELDT discloses the basic claimed expansion joint system except for the lateral wings having a thickness larger than the thickness of the elastic membranes. HARTKORN teaches that it is known in the art to form lateral wings (5,6) of a compression seal (1) such that the thickness of the lateral wings (5,6) is larger than the thickness of the elastic membranes (T,48). Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the compression seal of BAERVELDT with lateral wings having a larger thickness than the elastic membranes, as taught by HARTKORN in order to enhance the rigidity of the joint seal. Regarding claim 12, BAERVELDT discloses the use of a block-out region (as at 15) that has a thickness slightly greater than the lateral wing thickness (12). In reference to claim 13, HARTKORN teaches that his wings (5,) have a thickness of 3.5 cm that converts to 1.37 inches and is at least a half of an inch. In reference to claims 14 and 15, BAERVELDT discloses that his lateral wings (12) are bonded by adhesives and is bolted as at (B) to the block-out regions (column 4, letter (h)). Regarding claim 19, the compressible sealing portion includes longitudinal tubes (T) that extends along the length thereof. In reference to claim 20, , the compressible sealing portion includes a membrane having longitudinal tubes/cavities (T) that extends along the length thereof and are inherently known to aid in varying the lateral width of the member. Regarding claims 21, the lateral wing portion (5,6) includes longitudinal channels (CH). In reference 23, the compressible seal of BAERVELDT has the same cross-sectional configuration throughout. In reference to claim 25, the concrete elements (C) include a floor (CF), and a vertical wall (VW)

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wherein the compressible sealing portion (11) includes vertical side walls (VS) that are bonded to the vertical walls (VW) of the concrete floor (CF). Regarding claim 28, the "tubes/channels" (T) inherently change or deform in order to vary the width of the device.



Claims 17 and 18 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,584,152 to BAERVELDT in view of 4,637,085 to HARTKORN, as applied to claim 11 above, and further in view of US Patent #5,213,441 to BAERVELDT. BAERVELDT '152 discloses the basic claimed compression seal except for explicitly detailing the his rubber material used to form the seal is EPDM. BEARVELDT '441 teaches that it is known in the art to use EPDM rubber to form a compressible sealing member. Although BEARVELDT '441 does not explicitly detail ethylene propylene tetrapolymers, as per the applicant's own disclosure and from what is known by one having skill in the art, ethylene propylene tetrapolymers, in trade, is referred to as

EPDM. Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the compression seal of BAERVELDT '152, as modified by HARTKORN, out of the EPDM material of BEARVELDT '441 in order to provide stability, carry a torque and to accommodate different lengths in joint sizes.

Allowable Subject Matter

Claims 9,16,22 and 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 31 is allowed.

Response to Arguments

Applicant's arguments filed 8/17/05 have been fully considered but they are not persuasive.

Regarding the applicant's argument that the device of HARTKORN is a multi-piece device rather than a one-piece device, clearly the device, as noted in this and the previous Official Action comprises several components. However, the compression seal as desired by claim 1, is denoted as element (1) alone and does not require any of the other elements provided by HARTKORN. As far as the compression seal being bonded to adjacent elements, clearly, the compression seal of HARTKORN is bonded to elements (15,16). Otherwise, the claim does not specify which adjacent elements.

In reference to the applicant's argument that the material as taught by BAERVELDT '441 not being "suitable for" a one-piece, extruded compression seal, clearly the device of BAERVELDT '441 is a device that encompasses several

components; however, BAERVELDT '441 was used to teach the compression member itself or the parts that make up the compression seal but is rather used to teach the use of EPDM in the art of compression seals. Thus, it would have been obvious to make the device of HARTKORN using the material of BAERVELDT '441.

In reference to the applicant's argument that BAERVELDT '441 discloses several parts, the examiner agrees; however, the compression seal itself is a one-piece component. Furthermore, a reference is allowed to have more components than that required in the claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (571) 272-6845. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yvonne M. Horton
Art Unit 3635
11/08/05